- I am a member of the ARRL and am grateful for all of the good work this organization does on behalf of amateur radio. However I am $\underline{\text{opposed}}$ to the ARRL proposal to regulate the amateur radio spectrum in terms of signal bandwidths rather than in terms of emission type (mode), for the following reasons:
- (1) The ARRL proposal to regulate amateur frequency use according to bandwidth offers no advantages over regulation by mode as is currently done. Regulation by mode already accomplishes a de facto regulation by bandwidth, albeit not a precise regulation. Modes such as SSB, CW or AM each imply distinct bandwidths that are commonly used with these modes. CW requires less bandwidth (nominally 500 Hz) than SSB (nominally 2.8 kHz), for example, and good amateur practice already dictates using only the amount of bandwidth necessary to transmit the information on a given mode. The ARRL "band plans" are gentleman's agreements about which modes (and by implication which approximate bandwidths) should be used in the various parts of the amateur spectrum. Modifications to these ARRL band plans do not require rulemaking by the FCC as long as they don't violate the Part 97 Federal Code concerning authorized frequency bands, authorized emission types, and so on. Therefore I don't see any advantage to disturbing the status quo at this time.
- (2) Regulation by bandwidth would cause widespread confusion among amateur radio operators as they attempt to ascertain the bandwidth of their transmissions, which would in turn dictate which part of the bands they should transmit in. Many amateurs do not own spectrum analyzers and many may not have the experience to use these instruments. It is easy to specify, as the ARRL proposes, separate band regions for signals of bandwidth 200 Hz versus 500 Hz, for example. However, amateurs transmitting in CW mode may only know the approximate bandwidth occupied by their emitted signal, and would not be sure if they should be in the 200 Hz segment or the 500 Hz segment. This is not a problem under the current rule, where amateurs know to stay within the CW segments. Precisely measuring emitted bandwidth would be especially difficult for amateurs who build their own equipment, whether solid state QRP transmitters or vacuum tube transmitters. For example, CW transmitters may emit signals ranging from 200 Hz to approximately 500 Hz and an operator may not know what bandwidth is being occupied by the emitted signal. Enforcing regulations by precise bandwidths would therefore be an impractical regulatory nightmare with the potential to penalize reasonable law-abiding amateur radio operators.
- (3) The U.S. Amateur Bands as defined by the FCC and international law already provide the flexibility to accommodate future and experimental modes, flexibility that the ARRL is concerned is currently inadequate. In the terminology of Part 97, the regulated modes are identified with names such as "data", "phone", and "image". These terms are intentionally general enough so as to offer wide latitude for the development of new and experimental modes, and indeed such experimentation is explicitly encouraged by Part 97. Any incompatibilities that cause interference between modes can be worked out through revisions of the ARRL "band plans", which do not require FCC rulemaking.